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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,251	10/29/2004	Eva Binggeli	102790-179	7579

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EXAMINER	
PRATT, HELEN F	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
03/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/505,251	BINGGELI ET AL.	
	Examiner	Art Unit	
	Helen F. Pratt	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 15-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 15-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1-8, 12, 13, 15, 16, 17, 20, 21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schieberle (XP-002249876) or Berchtold et al. (WO 03/041515).

Schieberle (XP-002249876) disclose a process as in claim 1 of treating sesame seeds by roasting sesame seeds, which contain 2-furfurylthiol. The reference discloses that roasting of the odorless sesame seeds generates an intense flavor (page 145, paragraphs 1-3). Claim 1 differs from the reference in the use of particular roasting temperatures and in the use of Brassica seeds. However, the reference discloses that

sesame seeds contain 2-furfurylthiol which is also found in Brassica seeds (applicants' claim 12). Since the method has been disclosed by Schieberle, nothing new or unobvious is seen in heat -treating another type of seeds to promote the development of 2-furfurylthiol which is the active chemical that developed by the heat treatment.

Temperatures of 180 C for 30 minutes are disclosed as in claims 2 and 23 (page 145, paragraph 2). Therefore, it would have been obvious to heat treat other types of seeds to a higher temperature as shown by Schieberle in order to develop the 2-furfurylthiol flavor.

Crushing the seeds is disclosed on page 147, para. 2. as in claim 3.

An extract and distillate is disclosed as in claims 4 and 5 using a hydrocarbon (page, 148).

The product is disclosed as in claims 4 and 5 and 6 and an extract thereof as in claim 7 (page 148).

A consumable or flavor preparation is seen to have been made as the composition is disclosed as above as in claim 8.

2-Furfurythiol (FFT) is disclosed as being made by the process of claim 1 (page 145, 1st col.) as in claims 12 and 15.

An increase in the concentration of FFT of 100% is seen to have resulted as in claim 13, since before roasting the sesame seeds were odorless, but afterwards an intense flavor was developed (page 145, 1st para.).

The degree of concentration as in claims 16, 17, is seen to have been shown since the process has been shown as above. The product is considered to be a roasted brown material (page 147, 2nd. Para, page 148, 1and 2nd col.'s) .

Therefore, it would have been obvious to use a known method to treat other seeds which have FFT and to modify and to develop the FFT as shown by Schieberle.

Berchtold et al. disclose roasting seeds as in claim 1 from various families including cruciferum and brassica by continuously heating seeds to a predetermined temperatures (abstract). Times and temperatures as in claim 2 of up to 120 C for 10 minutes are disclosed on page 3, lines 14-18.

The product is seen to have had a flavor modifying property since it was heated to within the claimed time as in claims 1 and 2.

Reducing the seeds or fragmenting them is disclosed on page 5, lines 15-20 as in claim 3.

Products are disclosed as in claims 6 and 7, as in claim 1 which is a whole or fragmented heat- treat seed as in claims 1-7 of the reference (page 10, lines 1-30).

The product is considered consumable as in claim 8 since that is the purpose of treating the seeds as in claim 8 (page 12, lines 15-20).

Furfurylthiol (FFT) is seen to be increased to 100 % as in claims 12, 13, 15 since the process of heating to the claimed temperature has been shown as in claims 1 and 2.

Claims 20 and 21 further require particular sources of brassica seeds. However, as the group is small, it would have been within the skill of the ordinary worker to

choose particular cultivars. Therefore, it would have been obvious to use known cultivars to treat.

Claims 1-7, 12, 15, 16, 20, 21,22 are rejected under 35 U.S.C. 102(b) as being anticipated by Vasundhara et al. (XP 009014888).

Vasundhara discloses that the mustard seed (Brassica Juncea Linn) can be roasted which brings about a flavor change as in claims 1 and 22 to a temperature of 120 C for about 2 hours (claim 2), and ground as in claim 3 (abstract, page 685, 3rd, page 686, para. 1).

An extract is made as in claim 4 from methylene chloride and steam distilled as in claim 5 (page 686, lines 4 and 5).

A roasted powder is made as in claim 6 which is extracted as in claim 7 (page 686, 1st para.).

FFT is formed as in claim 12 (page 691 1st para.). The product containing FFT is formed as in claim 15 and claim 16.

Brassium junea is disclosed as in claims 20 and 21.

Claims 9-11, 16, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above references as applied to the above claims above, and further in view of Ott (WO 9895220).

Ott discloses a flavor composition for use in food containing FFT. As a consumable has been shown, no patentable distinction is seen in using an extract containing FFT absent a showing of unexpected results as in claim 9. Therefore, it

would have been obvious to use a known chemical such as FFT which is found as the active ingredient in Brassica seeds or extracts in whatever amounts found necessary. (abstract). A particular masking amount would have been within the skill of the ordinary worker as in claim 11 as it is known as a flavor ingredient. The particular amount of FFT as in claims 10, 16, 18-20 is seen to have been within the skill of the ordinary worker, as in using all flavorants. Therefore, it would have been obvious to use known ingredients which contain FFT for their known function of imparting flavoring and nutrition.

ARGUMENTS

Applicant's arguments filed 12-28-07 have been fully considered but they are not persuasive.

Applicants argue that Schieberle does not teach Brassica seeds. However, as above the reference discloses heating other seeds which contain the active ingredient FFT, and it would have been obvious to use other seeds that contain FFT.

Applicants argue that Berchtold does not disclose the preferred temperature ranges of 160 to 250 C. However the reference discloses heating up to 120 C which reads on Applicants claim 1. The lower limit of 160 C is not claimed until new claim 23.

Applicants argue that Vasundhara et al. do not teach the product of FFT. However, as the Brassica seeds are heated to the claimed temperature, FFT would have been developed absent a showing to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Helen F. Pratt/

Primary Examiner, Art Unit 1794

2-21-08